

ABSTRACT OF THE DISCLOSURE

A total-ink method ensures that the total amount of available colors remains the same such that the color characterization process can treat the restricted printing process as if it is dealing with a non-restricted printing process without loss of quality. This method enhances non-lossless, black generation methods traditionally used for total-ink restriction by generating compensated target device contone image data in which colorant applied to the media is limited based on a total ink constraint by providing a one-to-one mapping between each possible input contone image data value and each possible compensated target device contone image data value, using a bijective function, for example.